SD EForm - 0437 V1

DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES Minerals & Mining Program - Oil & Gas Section 2050 West Main, Suite #1, Rapid City, SD 57702-2493 Telephone: 605-394-2229, FAX: 605-394-5317

FORM 2 RECEIVED AUG 09 2012

**DEPT OF ENVIRONMENT & NATURAL** 

State of South Dakota DEPT OF ENVIRONMENT & NATURE OF SOUTH DAKOTON FOR PERMIT TO DRILL

Type of work: Drill New W	Vell Reenter We	ell Drill Direct	tional Well	Type of well:  ✓ Oil Well	Gas Well	Injection
Other						
Name and Address of Operator:  Peter K. Roosevelt  621 17th Street Suite 710, Denver, CO 80293  (303) 825-8606						
Name and Address of Surface Owner:						
Kenneth and Verna Barker 305 1st Avenue, Edgemont, SD 57735						
Name and Address of Drilling Contractor and Rig Number: to be determined						
Surface Location of well: Qtr-Qtr, Sec, Twp, Rge, County, feet from nearest lines of section, and latitude and longitude (if available):						
SWNE Sec.25,T9S,R2E,Fall River,SD, 2080'FNL,1986'FEL, LAT43.240337, LON103.825743						
If Directional, top of pay and bottom hole location from nearest lines of section:  NA						
Acres in Spacing (Drilling) Unit Description of Spacing Unit						
40ac. SWNE						
Well Name and Number		Elevation	Field and Pool, or Wildcat		Proposed Depth and	d Formation
7-25 Barker		3801.1'	wildcat	3170' Leo		
Size of Hole 1) 12 1/4 2) 7 7/8 3) 4)	Size of Casing 8 5/8 5 1/2	Weight per Foot 24# 14#	Depth 160' 3170'	0' 175sks class g 160'		
Describe Proposed Operations (Clearly State all Pertinent Details, and Give Pertinent Dates, Including Estimated Date of						
Starting any Proposed Work). Use additional page(s) if appropriate.  1. drill 12 1/4 hole surface to 180', set 160' of 8 5/8 surface casing. 2. drill 7 7/8 hole to 3170'. 3. log and evaluate Leo. 4. run 5 1/2 production casing if warrented or P&A according to the rules of the state of South Dakota. 5. pits will be lined w/12ml liner.						
I hereby certify that the foregoing as to any work or operation performed is a true and correct report of such work or operation.						
Signature		Peter K. Roosevelt Name (Print)		operator	r Fitle	0 <u>8/06</u> /2012 Date
FOR OFFICE USE ONLY						
Approved By: Title: Administrator Minerals: Mining Program						
Approved By: Title: Administrator Minerals: Mining Program  Permit No 2017						



## DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES

Minerals & Mining Program 2050 West Main Street, Suite #1 Rapid City, SD 57702-2493 Telephone: 605-394-2229

Fax: 605-394-5317

## PERMIT CONDITIONS

PKR: 7-25 Barker 9S-2E-25 SWNE, Fall River County Permit: #2017 API: 40 047 20339

Approval has been granted to drill this location as detailed on the attached Application for Permit to Drill (Form #2) with the following additional conditions:

- 1. This permit is conditioned on compliance with all applicable requirements of South Dakota Codified Laws 45-9 and Administrative Rules of South Dakota 74-12.
- 2. A 12-mil woven, reinforced high-density polyethylene liner must be used on all pits.
- 3. Surface runoff must be diverted around the drill site.
- 4. The surface hole must be drilled with fresh water.
- 5. Cement must be circulated to the ground surface on the surface casing.
- 6. If production casing (long string) is set:
  - A. Cement must be circulated on the long string from TD to the top of the Fall River, plus 50 feet.
  - B. A cement bond log must be run and filed with the department within 60 days of completion of the well.
- 8. If abandoned:
  - A. With long string, sufficient cement must be circulated to install:
    - 1. A 100-foot cement plug immediately above the perforation.
    - 2. A 100-foot cement plug, half in and half out of the top of the casing stub after the retrievable part of the production casing has been removed.
    - 3. A 100-foot cement plug, half in and half out of the top of any fresh water aquifer between the top of the casing stub and the base of the surface casing. Potential freshwater resources at this site include: Minnelusa, Minnekahta, Canyon Springs, and Inyan Kara.
    - 4. A 100-foot plug, half in and half out of the base of the surface casing.
    - 5. A 25-foot cement plug at the top of the surface casing.
  - B. Without long string, sufficient cement must be circulated to set:
    - 1. 100-foot cement plugs, half in and half out of the top of the following formations: Red River, Minnelusa, Minnekahta, Canyon Springs, and Inyan Kara.
    - 2. A 100-foot cement plug, half in and half out of the base of the surface casing.
    - 3. A 25-foot cement plug at the top of the surface casing.
  - C. Heavy, mud-laden fluid must be used between all plugs.
  - D. The casing string must be cut off at least three feet below the final ground surface contour. A plate with the name of the operator, well name and number, and legal location by quarter-quarter section, township and range must be welded to the casing stub. The location of the abandoned well must be surveyed with high resolution global positioning system equipment or other appropriate survey methods sufficient to accurately locate the well. Survey coordinates must be included in the final abandonment report.
- 9. Surface reclamation of the site must be completed within one year of plugging and abandoning the well.

10. A washed set of sample cuttings (or cores, if cut) must be shipped, free of charge, to:

Derric Iles Geological Survey Program Akeley-Lawrence Science Center University of South Dakota 414 E. Clark Street Vermillion, SD 57069-2390

11. Please notify this office prior to plugging so a witness can be on location. If plugging will occur after regular business hours, call Lucy Dahl at 605-773-6257.